



**WEBINAR**



# Using the Moisture Adjustment Feature in Genesis R&D<sup>®</sup> for Baked Goods

Presented by **ESHA Research**

Wednesday, August 11, 2021

11:00 AM PDT | 1:00 PM CDT | 2:00 PM EDT



# ESHA Research

ESHA Research was established in 1981 as one of the very first nutrition software solutions. Today, ESHA's suite of nutritional software products, services, and databases are recognized as the industry's top choice for food and supplement formulation, recipe development, labeling, nutritional analysis, and regulatory compliance.

## **ESHA Solutions**

- Genesis R&D<sup>®</sup> Food Formulation
- Genesis R&D<sup>®</sup> Supplement Formulation
- Food Processor<sup>®</sup> Nutrition & Diet Analysis
- Consulting Services

Our mission is to help remove the complexity of product development and regulatory compliance for the food, beverage, and supplement industries through software, services, and nutritional databases.



# Genesis R&D Foods

Genesis R&D Foods, first released in 1991, is designed to help users manage processes, overcome industry challenges, and meet federal requirements. Industry professionals use Genesis R&D for quick and accurate nutrient evaluation, virtual product development, nutrition labeling, and regulatory compliance.

- Product Development
- Formulation Analysis
- Menu Analysis
- Reporting
- Regulatory Compliance





# Upcoming Webinars

## **September 15, 2021 | Tips for Success: Organizing Your Recipes & Ingredients in Genesis R&D Foods**

Having a strong organizational structure in place lays the foundation for easier management of your Ingredients, Recipes, Food Menus, and Nutrition Facts Labels. During this webinar, we will look at how to populate the available data fields in Genesis R&D Foods and use them for searching, exporting, access control, and more.

## **October 20, 2021 | Tips for Success: Searching for Recipes & Ingredients in Genesis R&D Foods**

Genesis R&D Foods offers many filters to narrow your searches, helping you find exactly what you are looking for. When developing a recipe, you may want to search for ingredients by specific nutrient content, such as high in protein or low in saturated fat. Alternatively, you might want to find recipes that contain a particular ingredient. This webinar covers the different database search filters and other searching tips.

To view archived webinars or sign up to receive notifications, visit:

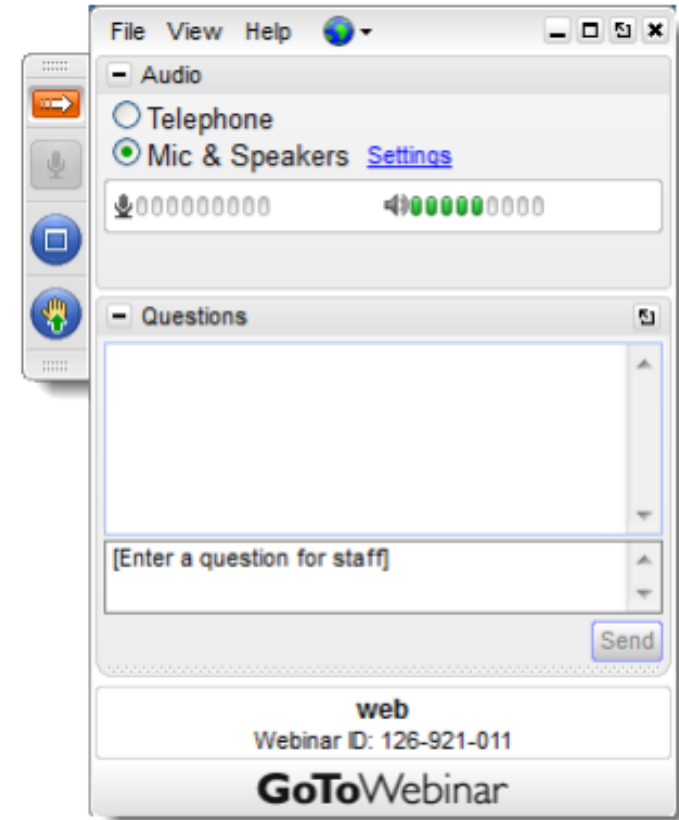
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# Please Note!

- ✓ The webinar is being recorded
- ✓ All webinars available on our website
- ✓ Submit your questions in the GoToWebinar control panel
- ✓ We'll email a copy of the recording and the slides following the webinar

WEBINAR



# What We'll Cover Today



- Moisture/Water Content in Ingredients
- Nutrients to View
- Spreadsheet to Review Recipe
- Determining Moisture Content
- Using the Moisture Adjustment Feature
- Best Practices
- Q&A





# Moisture Adjustments in Foods

- Moisture content can be lost when foods are cooked
- Moisture loss can affect the nutritional content per serving of food
- Use moisture adjustments to fine-tune the values on the Nutrition Facts panel





# Moisture/Water Content in Ingredients

- When entering ingredients from supplier spec sheets, enter the “moisture” or “water” content
- May be expressed as “Moisture” in grams or as a percent
- In Genesis, enter value in the field called “Water”
- With few exceptions, you want to enter the moisture content for all ingredients

Ingredient: flour, all purpose, w... x

Ingredient: flour, all purpose, white, bleached, enriched - □ x

Selected Nutrients to View: Label - US 2016 Mandatory  
\* %DV based on US Label 2016 standards.  
Nutrient values based on 100.00 grams

Nutrients	Value	% DV*
Cholesterol (mg)	0	0
<b>Water (g)</b>	11.92	
Ash (g)	0.47	
Kilojoules (kJ)	1522.98	
<b>Vitamins</b>		
Vitamin A - IU (IU)	0	
Vitamin A - RAE (mcg)	0	0
Vitamin A - RE (mcg)	0	
Carotenoid RE (mcg)	0	

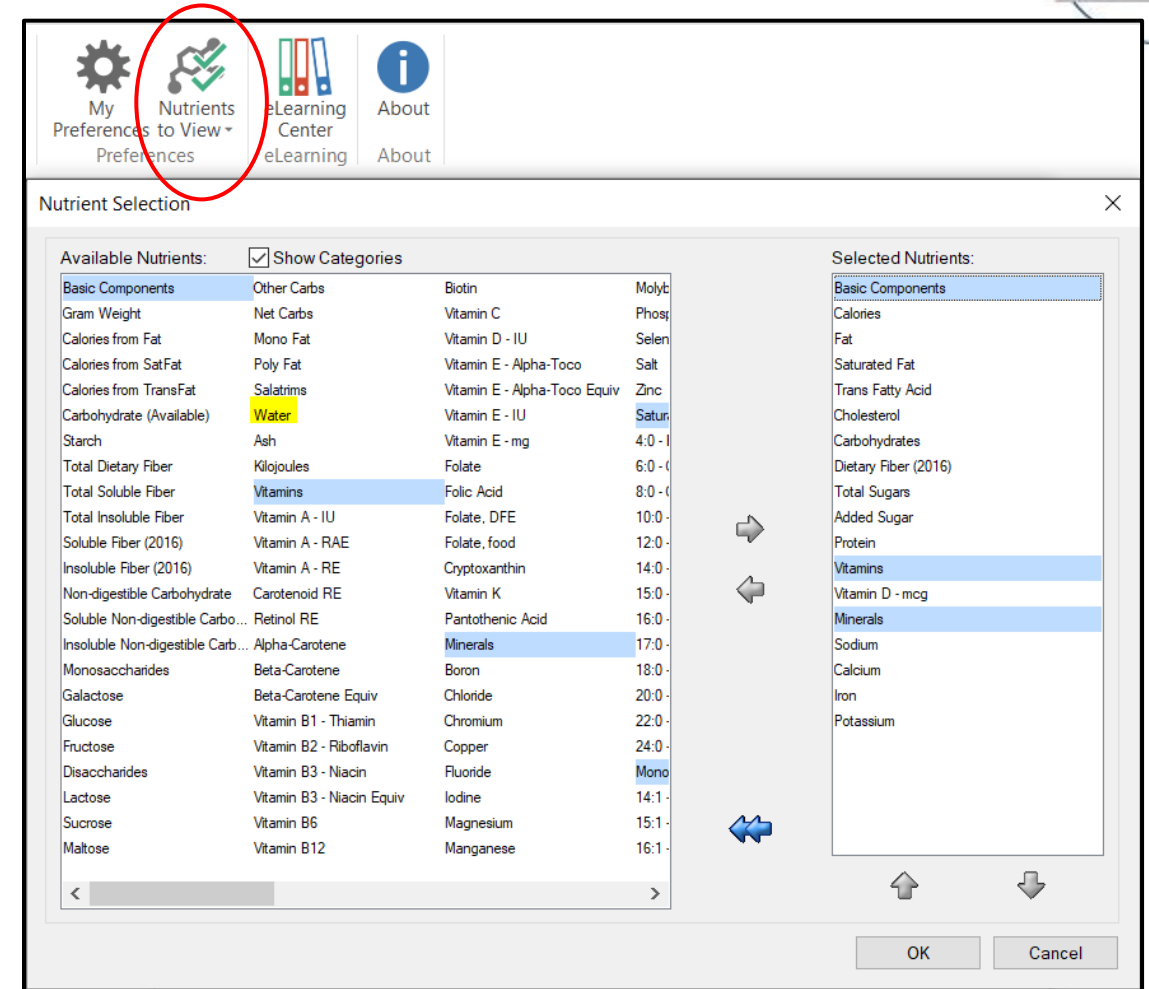
Show All Nutrients    Alphabetize Nutrients    Auto Calculations





# Nutrients to View

- Selecting Nutrients to View on screen and reports
- Include Water as one of the Nutrients to View to enter and review the moisture content of ingredients and recipes





# Review the Spreadsheet

- Look for missing values – indicated by a dashes
- Fill in missing values for each ingredient (at the Ingredient record)

Item Name	Quantity	Measure	Wgt (g)	Cals (kcal)	Water (g)	Prot (g)	Carb (g)	TotFib (g)	Fib(16) (g)	Su
Bread needs Water	1	Serving	43.00	93.31	21.11	2.40	18.44	0.70	0.70	
flour, all purpose, white, unbleached, enriched	0.046955	Pound	21.30	77.53	2.54	2.20	16.25	0.58	0.58	
Water	0.052141	Pound	23.65	0	23.65	0	0	0	0	
sugar, white	0.004174	Pound	1.89	7.46	--	0	1.99	0	0	
yeast, bakers, active, dry	0.001043	Pound	0.47	1.54	0.02	0.19	0.20	0.13	0.13	
salt, table	0.000031	Pound	0.01	0	0.00	0	0	0	0	
Butter	0.002087	Pound	0.95	6.79	0.17	0.01	0.00	0	0	
Moisture Adjustment: Loss	20.00	Percent	- 5.28		- 5.28					
Total	1	Serving	43.00	93.31	21.11	2.40	18.44	0.70	0.70	

# Determining Moisture Adjustment for Recipe



- Obtain by lab analysis
- Moisture analyzer
- Estimate from before and after weights of food portion or recipe batch
  - Before weight: portion of dough
  - After weight: same portion as baked product



# Using the Moisture Adjustment Feature

- Edit Yields
- Enter
  - Loss or Target
  - In terms of Weight or Percent of Moisture
    - *Percent* moisture loss = what percent of the total moisture content was lost?
- Yield Adjustment screen shows
  - Original moisture value per batch
  - Adjustment per batch

Yield Adjustments

Enter yield adjustments.

**Moisture**  
Original Value: 39.17 g (39.17%)  
 Loss    Amount: 6.00    Units: Gram  
 Target

**Fat**  
Original Value: 5.41 g (5.41%)  
 Loss    Amount:    Units: Percent  
 Target

**Processing**  
 Loss    Amount:    Units: Percent

OK    Cancel



# Best Practices

- When entering ingredients, look for moisture/water content information
- Contact your supplier to request moisture/water information
- Review your recipes and ingredients carefully
  - Review Spreadsheet report for all Recipes
  - Use the Check Data feature to view mathematical checks
- Document Adjustments
  - Add lab analysis or other measurement values in the Recipe Notes
  - Record before and after weights of dough to bread



# Genesis R&D Training

## Genesis R&D Foods Professional + FDA Regulations

This 2-day training session covers the fundamentals of the Genesis R&D Food program with a primary focus on FDA regulations: creating ingredients and composite ingredients, building recipes/formulas, nutrition analysis, moisture loss, reporting, labeling, best practices, and much more. In addition, this session covers a comprehensive FDA regulatory review.

## Genesis R&D Foods Advanced Training

The 1-day Advanced session builds upon the skills learned in the Professional training and offers deeper learning on topics including PDCAAS, International Food Labeling, Advanced Label Settings, and more.

Title	Date	Location
Genesis R&D Foods Professional + FDA Regulations Genesis R&D Foods Advanced	Sept. 21-22, 2021 Sept. 23, 2021	<b>IN-PERSON &amp; Online</b> ESHA Training Center Oak Brook, IL
Genesis R&D Foods Professional + FDA Regulations Genesis R&D Foods Advanced	Oct. 12-13, 2021 Oct. 14, 2021	Online only
Genesis R&D Foods Professional + FDA Regulations Genesis R&D Foods Advanced	Nov. 2-3, 2021 Nov. 4, 2021	<b>IN-PERSON &amp; Online</b> ESHA Training Center Oak Brook, IL
Genesis R&D Foods Professional + FDA Regulations Genesis R&D Foods Advanced	Nov. 30 – Dec. 1, 2021 Dec. 2, 2021	Online only

### Session Options:

- 3-day Combined Professional + Advanced Training
- 2-day Professional Training
- 1-day Advanced Training (Prerequisite: Professional Training)

**Contact:** [training@esha.com](mailto:training@esha.com) or **Visit:** <https://esha.com/news-events/training-schedule/>

QUESTIONS?



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